BEST AVAILABLE COPY

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE (Case No. 99,818)

In re A	Application of:)	세 :
	Mark O. Vogel, et al.)	
) A	Art Unit: 2711
Serial	No.: 09/538,342) } F	Examiner: To be Assigned
Filed:	March 29, 2000)	
For:	Method for Improved Cable Modem Ranging in a Data-Over-Cable System)))	
	Commissioner for Patents ington, D.C. 20231		,
	TRANSMITTAL LE	ETTER	
1.	We are transmitting herewith the attached papers for the	ne above-id	entified new patent application:
	☐ Information Disclosure Statement (IDS)		
	☑ PTO-1449 Form		
	Copies of Fifty-Eight (58) Cited Reference	s for 09/53	8,342

- 2. No fees are due at this time.
- GENERAL AUTHORIZATION TO CHARGE OR CREDIT FEES: Please charge any 3. additional fees or credit overpayment to Deposit Account No. 13-2490. A duplicate copy of this sheet is enclosed.
- CERTIFICATE OF MAILING UNDER 37 CFR § 1.8: The undersigned hereby certifies that 4. this Transmittal Letter and the papers, as described in paragraph 1 herein-above, are being deposited with the United States Postal Service with sufficient postage as "First Class Mail" in an envelope addressed to: Asst. Commissioner for Patents, Washington, D.C. 20231, on this 16th day of June 2000.

Rég. No. 35,999

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE (Case No. 99,818)

In re	Application of:)	•
	Mark O. Vogel, et al.)	
Serial	No.: 09/538,342)	Art Unit: 2711
	March 29, 2000)	Examiner: To be Assigned
i nca.	Water 27, 2000)	
For:	Method for Improved Cable Modem Ranging in a Data-Over-Cable System))	

INFORMATION DISCLOSURE STATEMENT

Asst. Commissioner for Patents Washington, D.C. 20231

Dear Sir:

Pursuant to 37 C.F.R. Section 1.97-1.98, and in accordance with the duty of candor set forth in 37 C.F.R. §1.56, applicants wish to make the following references of record in the above-identified application. Copies of the references cited below are enclosed along with a copy of completed PTO Form-1449.

I. U.S. PATENT DOCUMENTS

Document Number		Date	Name
1)	5,014,234	05-07-91	Edwards, Jr.
2)	5,138,712	08-11-92	Corbin
3)	5,347,304	09-13-94	Moura et al.
4)	5,442,749	08-15-95	Northcutt et al.
5)	5,487,180	01-23-96	Ohtake
6)	5,488,412	01-30-96	Majeti et al.
7)	5,489,897	02-06-96	Inoue

8)	5,583,931	12-10-96	Schneider et al.
9)	5,586,121	12-17-96	Moura et al.
10)	5,600,717	02-04-97	Schneider et al.
11)	5,606,606	02-25-97	Schneider et al.
12)	5,608,446	03-04-97	Carr et al.
13)	5,623,542	04-22-97	Schneider et al.
14)	5,623,601	04-22-97	Vu
15)	5,636,211	06-03-97	Newlin
16)	5,675,732	10-07-97	Majeti et al.
17)	5,710,885	01-20-98	Bondi
18)	5,761,602	06-02-98	Wagner et al.
19)	5,778,181	07-07-98	Hidary et al.
20)	5,790,198	08-04-98	Roop, et al.
21)	5,790,548	08-04-98	Sistanizadeh, et al.
22)	5,790,677	08-04-98	Fox, et al.
23)	5,799,086	08-25-98	Sudia
24)	5,805,804	09-08-98	Laursen, et al.
25)	5,812,819	09-22-98	Rodwin et al.
26)	5,818,845	10-06-98	Moura, et al.
27)	5,819,042	10-06-98	Hansen
28)	5,828,655	10-27-98	Moura, et al.
29)	5,835,727	11-10-98	Wong et al.
30)	5,854,901	12-29-98	Cole, et al.
31)	5,859,852	01-12-99	Moura, et al.
32)	5,864,679	01-26-99	Kanai, et al.

33)	5,870,134	02-09-99	Laubach, et al.
34)	5,872,523	02-16-99	Dellaverson, et al.
35)	5,884,024	03-16-99	Lim et al.
36)	5,922,049	07-13-99	Radia, et al.
37)	5,923,659	07-13-99	Curry, et al.
38)	5,958,007	09-28-99	Lee et al.
39)	5,974,453	10-26-99	Anderson et al.
40)	5,996,076	11-30-99	Rowney et al.
41)	6,009,103	12-28-99	Woundy
42)	6,012,088	01-04-00	Li et al.
43)	6,013,107	01-11-00	Blackshear et al.
44)	6,018,767	01-25-00	Fijolek et al.
45)	6,049,826	04-11-00	Beser
46)	6,058,421	05-02-00	Fijolek et al.
47)	6,070,246	05-30-00	Beser

II OTHER DOCUMENTS

- 48) "Baseline Privacy Interface Specification (Interim) SP-BPI-I01-970922", MCNS Holdings, L.P., 1997, Pgs. ii to 65.
- 49) "Security System Specification (Interim Specification) SP-SSI-I01-970506", MCNS Holdings, L.P., 1997, Pgs. ii to 103.
- 50) "Cable Modem to Customer Premise Equipment Interface Specification (Interim) SP-CMCI-I02-980317", Multimedia Cable Network Systems (MCNS) Holdings, L.P., Cable Television Laboratories, Inc., 1998, Pgs. ii to 40.
- 51) "Operations Support System Interface Specification Baseline Privacy Interface MIB (Interim Specification) SP-OSSI-BPI-I01-980331", MCNS Holdings, L.P., 1997 and 1998, Pgs. ii to 33.
- 52) "Cable Modem Termination System-Network Side Interface Specification (Interim Specification) SP-CMTS-NSII01-960702", MCNS Holdings, L.P., 1996, Pgs. ii to 13.

53) "Removable Security Module Interface Specification (Interim Specification) SP-RSMI-I01-980204", MCNS Holdings, L.P., Cable Television Laboratories, Inc., 1997, Pgs. ii to 47.

4) "Operations Support System Interface Specification (Interim) SP-OSSII01-970403",

MCNS Holdings, L.P., 1997, Pgs. 1 to 30.

55) "Radio Frequency Interface Specification (Interim Specification) SP-RFI-I02-971008",

MCNS Holdings, L.P., 1997, Pgs. ii to 186.

56) "Cable Modem Telephony Return Interface Specification (Interim) SP-CMTRI-I01-

970804", MCNS Holdings, L.P., Cable Television Laboratories, Inc., 1997, Pgs. ii to 73.

57) "Dynamic Host Configuration Protocol (DHCP)", Request for Comments 2131, Internet

Engineering Task Force, March 1997, Pgs. 1 to 42.

58) "IPCDN Telephony Return MIB", IPCDN Working Group, Internet Engineering Task

Force, March 1998, Pgs. 1 to 26.

III. DISCUSSION

Applicants submit that these documents, whether taken alone or in combination, fail to

show or suggest the claimed subject matter. Applicants request that the Examiner consider the

entirety of each document and make them of record in this application. Applicants' submission

of these documents for consideration is not to be construed as an admission that the documents

qualify as prior art to the claimed subject matter, a representation that a search has been made,

nor as an admission that the information is considered to be material to patentability.

Respectfully submitted,

McDonnell, Boehnen, Hulbert & Berghoff

Date: June 16, 2000

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iaimew J. Samps

Reg. No. 35,999

FORM PTO-1449 (Rev. 2-32)	U.S. Department of Commerce Patent and Trademark Office	Atty. Docket No.	Serial No.	
(nev. 2-32)	nev. 2-32) Patent and Trademark Office		09/538,342	
	INFORMATION DISCLOSURE STATEMENT BY APPLICANT			
	(Use several sheets if necessary)			
		Applicant:		
		Mark O. Vogel, et al.		
		Filing Date:	Group:	
		3/29/00	2711	

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	1	5,014,234	05-07-91	Edwards, Jr.	364	900	08-25-86
	2	5,138,712	08-11-92	Corbin	395	700	10-02-89
	3	5,347,304	09-13-94	Moura et al.	348	12	07-28-93
	4	5,442,749	08-15-95	Northcutt et al.	395	200.09	07-09-93
	5	5,487,180	01-23-96	Ohtake	455	54.1	03-17-94
	6	5,488,412	01-30-96	Majeti et al.	348	10	03-31-94
	7	5,489,897	02-06-96	Inoue	340	870.39	04-13-93
	8	5,583,931	12-10-96	Schneider et al.	379	399	07-14-95
	9	5,586,121	12-17-96	Moura et al.	370	404	04-21-95
	10	5,600,717	02-04-97	Schneider et al.	379	399	06-14-96
	11	5,606,606	02-25-97	Schneider et al.	379	399	06-14-96
	12	5,608,446	03-04-97	Carr et al.	348	6	05-09-95
	13	5,623,542	04-22-97	Schneider et al.	379	399	06-14-96
	14	5,623,601	04-22-97	Vu	395	187.01	11-21-94
	15	5,636,211	06-03-97	Newlin et al.	370	465	8-15-95
	16	5,675,732	10-07-97	Majeti et al.	395	200.01	05-08-95
	17	5,710,885	01-20-98	Bondi	395	200.54	11-28-95

EXAMINER	DATE CONSIDERED

FORM PTO-1449	U.S. Department of Commerce Patent and Trademark Office	Atty. Docket No.	Serial No.	
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Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	18	5,761,602	06-02-98	Wagner et al.	455	3.1	09-13-95
	19	5,778,181	07-07-98	Hidary et al.	395	200.48	03-14-96
	20	5,790,198	08-04-98	Roop, et al.	348	460	05-04-94
	21	5,790,548	08-04-98	Sistanizadeh, et al.	370	401	04-18-96
	22	5,790,677	08-04-98	Fox, et al.	380	24	06-29-95
	23	5,799,086	08-25-98	Sudia	380	23	02-19-97
	24	5,805,804	09-08-98	Laursen, et al.	395	200.02	03-12-97
	25	5,812,819	09-22-98	Rodwin et al.	395	500	06-05-95
	26	5,818,845	10-06-98	Moura, et al.	370	449	01-18-96
	27	5,819,042	10-06-98	Hansen	395	200.52	02-20-96
	28	5,828,655	10-27-98	Moura, et al.	370	236	08-21-96
	29	5,835,727	11-10-98	Wong et al.	395	200.68	12-09-96
	30	5,854,901	12-29-98	Cole, et al.	709	245	07-23-96
	31	5,859,852	01-12-99	Moura, et al.	370	449	08-27-96
	32	5,864,679	01-26-99	Kanai, et al.	709	238	05-21-97
	33	5,870,134	02-09-99	Laubach, et al.	348	12	03-04-97
	34	5,872,523	02-16-99	Dellaverson, et al.	340	825.52	03-12-96

EXAMINER	DATE CONSIDERED

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		Mark O. Vogel, et al	•
		Filing Date:	Group:
		3/29/00	2711

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	35	5,884,024	03-16-99	Lim et al.	395	187.01	12-09-96
	36	5,922,049	07-13-99	Radia, et al.	709	220	12-09-96
	37	5,923,659	07-13-99	Curry, et al.	370	401	09-20-96
	38	5,958,007	09-28-99	Lee et al.	709	219	05-13-97
	39	5,974,453	10-26-99	Anderson et al.	709	220	10-08-97
	40	5,996,076	11-30-99	Rowney et al.	713	201	02-19-97
	41	6,009,103	12-28-99	Woundy	370	401	12-23-97
	42	6,012,088	01-04-00	Li et al.	709	219	12-10-96
	43	6,013,107	01-11-00	Blackshear et al.	703	229	10-06-97
	44	6,018,767	01-25-00	Fijolek et al.	709	218	02-24-98
	45	6,049,826	04-11-00	Beser	709	222	02-04-98
	46	6,058,421	05-02-00	Fijolek et al.	709	225	02-04-98
	47	6,070,246	05-30-00	Beser	713	201	02-04-98

EXAMINER	DATE CONSIDERED
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<u>ii</u>	!

FORM PTO-1449 (Rev. 2-32)	U.S. Department of Commerce Patent and Trademark Office	Atty. Docket No.	Serial No.
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		Applicant:	
		Mark O. Vogel, et al.	
		Filing Date:	Group:
		3/29/00	2711

FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	Subclass	Trans	lation
						Yes	No

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc).

	48	"Baseline Privacy Interface Specification (Interim) SP-BPI-I01-970922", MCNS Holdings, L.P., 1997, Pgs. ii to 65.
	49	"Security System Specification (Interim Specification) SP-SSI-I01-970506", MCNS Holdings, L.P., 1997, Pgs. ii to 103.
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	53	"Removable Security Module Interface Specification (Interim Specification) SP-RSMI-I01-980204", MCNS Holdings, L.P., Cable Television Laboratories, Inc., 1997, Pgs. ii to 47.
	54	"Operations Support System Interface Specification (Interim) SP-OSSII01-970403", MCNS Holdings, L.P., 1997, Pgs. 1 to 30.
	55	"Radio Frequency Interface Specification (Interim Specification) SP-RFI-I02-971008", MCNS Holdings, L.P., 1997, Pgs. ii to 186.

EXAMINER	DATE CONSIDERED

FORM PTO-1449 (Rev. 2-32)	U.S. Department of Commerce Patent and Trademark Office		Serial No.
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	INFORMATION DISCLOSURE STATEMENT BY APPLICANT		
	(Use several sheets if necessary)		
į		Applicant:	
l		Mark O. Vogel, et a	ıl.
		Filing Date:	Group:
Į		3/29/00	2711

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc).

56	"Cable Modern Telephony Return Interface Specification (Interim) SP-CMTRI-I01-970804", MCNS Holdings, L.P., Cable Television Laboratories, Inc., 1997, Pgs. ii to 73.
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58	"IPCDN Telephony Return MIB", IPCDN Working Group, Internet Engineering Task Force, March 1998, Pgs. 1 to 26.

ſ		
	EXAMINER	DATE CONSIDERED
1	1	

Hon. Commissioner of

S/N 09/538,342

MЛ

Patents and Trademarks

Re: Applicant - Mark O. Vogel et al.

Case No. 99,818

Method for Improved Cable Modem Ranging in a Data-Over-Cable System

Sir:

Please place the Patent Office receipt stamp hereon and mail to acknowledge receipt of:

Transmittal in Duplicate \boxtimes

Information Disclosure Statement (IDS)

Information Disclosure Statement (IDS)
 PTO-1449 Form
 Copies of Fifty-Eight (58) Cited References for 09/538,342
 Filing Fee Check

Respectfully, McDonnell Boehnen Hulbert & Berghoff Attorney for Applicant

Date Mailed: June 16, 2000

UNITED STATES PATENT AND TRADEMARK OFFICE

(Case No. 99,818)

IN THE APPLI	CATION OF:)	
· Voge	l et al.)	
Serial No.	09/538,342) Examiner:	To Be Advised
Filed:	March 29, 2000) Group Art Unit:	2711
Title	Method For Improved Cable Modem Ranging In A Data-Over-Cable System)))	
BOX DD Commissione Washington,			
Sir:			

TRANSMITTAL LETTER

In regard to the above identified application:

- We are transmitting herewith the attached:
 - a. Supplemental Information Disclosure Statement;
 - b. Supplemental Form PTO-1449;
 - c. Copy of IDS Citations 09/538,342 (76 references);
 - d. Return Receipt Postcard.
- With respect to additional fees:
 - No additional fee is required.
- 3. Please charge any additional fees or credit overpayment to Deposit Account No.13-2490. A duplicate copy of this sheet is enclosed.
- 4. CERTIFICATE OF MAILING UNDER 37 CFR § 1.8: The undersigned hereby certifies that this Transmittal Letter and the paper; as described in paragraph 1 hereinabove, are being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Box DD, Washington, D.C. 20231 on this 19th day of December, 2001.

Ву∶

Timothy R. Baumann Reg. No. 40,502

McDONNELL BOEHNEN, HULBERT & BERGHOFF 300 SOUTH WACKER DRIVE CHICAGO, ILLINOIS 60606 TELEPHONE (312) 913-0001

UNITED STATES PATENT AND TRADEMARK OFFICE (Case No. 99,818)

IN THE APPLICATION OF:

Vogel et al.

Serial No. 09/538,342

Filed: March 29, 2000

Title Method For Improved Cable Modem Ranging In A Data-Over-Cable System

System

Ranging In A Data-Over-Cable System

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

BOX DD Commissioner for Patents Washington, D.C. 20231-9999

Dear Sir:

Pursuant to the duty of disclosure provided by 35 C.F.R. § 1.56 and §§ 1.97-98, the applicants wish to make the following references of record in the above-identified application. Copies of the references are enclosed. Copies are also listed in the PTO-1449 form enclosed herewith. It is requested that the documents be given careful consideration and that they be cited of record in the prosecution history of the present application so that they will appear on the face of the patent issuing from the present application.

Portions of the references may be material to the examination of the pending claims, however no such admission is intended. 37 C.F.R. 1.97 (h). The references have not been reviewed in sufficient detail to make any other representation and, in particular, no representation is intended as to the relative importance of any portion of the

references. This Statement is not a representation that the cited references have effective dates early enough to be "prior art" within the meaning of 35 U.S.C. sections 102 or 103.

CITED REFERENCES

U.S. Patent Documents

Document Number	Date	Name	Class.	Sub Class	Filing Date of App.
4,644,533	02/17/1997	Braff et al.	370	94	05/06/1985
4,881,263	11/14/1989	Herbison et al.	380	21	09/25/1987
4,996,685	02/26/1991	Farese et al.	370	58.1	04/10/1989
5,301,273	04/05/1994	Konishi	395 ·	200	06/18/1991
5,430,727	07/04/1995	Callon	370	85.13	05/19/1994
5,598,410	01/28/1997	Stone	370	469	12/29/1994
5,610,910	03/11/1997	Focsaneanu et al.	370	351	08/17/1995
5,675,742	10/07/1997	Jain et al.	395	200	06/26/1995
5,708,654	01/13/1998	Arndt et al.	370	242	11/27/1996
5,724,510	03/03/1998	Arndt et al.	395	200.5	09/06/1996
5,790,770	08/04/1998	McClure et al.	395	200.61	07/18/1996
5,790,806	08/04/1998	Koperda	395	200.82	04/03/1996
5,793,747	08/11/1998	Kline	370	230	03/14/1996
5,809,252	09/15/1998	Beighe et al.	395	200.57	12/13/1996
5,819,028	10/06/1998	Manghirmalani et al.	395	185.1	04/16/1997
5,828,666	10/27/1998	Focsaneanu et al.	370	389	03/06/1997
5,835,720	11/10/1998	Nelson et al.	395	200.54	05/17/1996
5,841,777	11/24/1998	Cohen	370	433	08/30/1996
5,852,721	12/22/1998	Dillon et al.	395	200.47	02/07/1997
5,894,479	04/13/1999	Mohammed	370	401	12/10/1996
5,903,558	05/11/1999	Jones et al.	370	351	06/28/1996
5,909,549	06/01/1999	Compliment et al.	709	223	11/12/1996
5,913,037	06/15/1999	Spofford et al.	395	200.56	07/03/1996

Document Number	Date	Name	Class	Sub Class	Filing Date of App.
5,915,119	06/22/1999	Cone	395	750.02	10/01/1996
5,922,051	07/13/1999	Sidey	709	223	05/14/1997
5,943,604	08/24/1999	Chen et al.	455	5.1	10/31/1997
5,954,797	09/21/1999	Sidey	709	223	05/14/1997
5,982,748	11/09/1999	Yin et al.	370	232	10/03/1996
5,987,524	11/16/1999	Yoshida et al.	709	245	09/30/1997
5,991,292	11/23/1999	Focsaneanu et al.	370	352	03/06/1997
5,991,306	11/23/1999	Burns et al.	370	429	08/26/1996
5,999,536	12/07/1999	Kawafuji et al.	370	401	11/24/1997
6,003,077	12/14/1999	Bawden et al.	709	223	09/15/1997
6,005,851	12/21/1999	Craddock et al.	370	329	10/10/1997
6,006,264	12/21/1999	Colby et al.	. 709	226	03/30/1998
6,014,545	01/11/2000	Wu et al.	455	3.1	03/27/1997
6,031,841	02/29/2000	Woundy	370	410	12/23/1997
6,041,041	03/21/2000	Ramanathan et al.	370	241	04/15/1997
6,049,546	04/11/2000	Ramakrishnan	370	412	10/15/1996
6,049,825	04/11/2000	Yamamoto	709	221	12/15/1997
6.052,724	04/18/2000	Willie et al.	709	223	09/02/1997
6,061,349	05/09/2000	Coile et al.	370	389	05/02/1997
6,065,049	05/16/2000	Beser	709	218	02/04/1998
6,070,187	05/30/00	Subramaniam et al.	709	220	03/26/1998
6,070,242	05/30/2000	Wong et al.	713	201	12/09/1996
6,073,178	06/06/2000	Wong et al.	709	229	12/09/1996
6,075,787	06/13/2000	Bobeck et al.	370	395	05/08/1997
6,091,709	07/18/2000	Harrison et al.	370	235	11/25/1997
6,094,431	07/25/2000	Yamato et al.	370	395	11/29/1996
6,104,700	08/15/2000	Haddock et al.	370	235	02/03/1998
6,112,258	08/29/2000	Miller et al.	710	19	03/19/1998
6,122,254	09/19/2000	Aydemir et al.	370	235	11/25/1997

Document Number	Date	Name	Class	Sub Class	Filing Date of App.
6,128,298	10/03/2000	Wootton et al.	370	392	10/03/2000
6,130,879	10/10/2000	Liu	370	230	09/22/1997
6,130,880	10/10/2000	Naudus et al.	370	235	03/20/1998
6,137,792	10/24/2000	Jonas et al.	370	354	06/14/1996
6,137,793	10/24/2000	Gorman et al.	370 ·	360	12/05/1997
6,148,410	11/14/2000	Naskey et al.	714	4	09/15/1997
6,157,965	12/05/2000	Mohammed et al.	710	8	02/27/1998
6,170,061	01/02/2001	Beser	713	201	02/04/1998
6,178,455	01/23/2001	Schuttte et al.	709	228	04/11/1997
6,185,624	02/06/2001	Fijolek et al.	709	239	02/04/1998
6,189,102	02/13/2001	Beser	713	201	05/27/1998
6,208,656	03/27/2001	Hrastar et al.	. 370	401	04/11/1997
6,212,563	04/03/2001	Beser	709	227	10/01/1998
6,216,171	04/10/2001	Isono et al.	709	250	02/11/1998
6,223,222	04/24/2001	Fijolek et al.	709	227	05/14/1998
6,240,464	05/29/2001	Fijolek et al.	709	250	02/04/1998
6,260,072	07/10/2001	Rodriguez-Moral	709	241	06/12/1997
6,269,099	07/31/2001	Borella et al.	370	389	07/01/1998
6,272,150	08/07/2001	Hrastar	370	486	05/05/1997
6,275,853	08/14/2001	Beser et al.	709	223	05/27/1998
6,295,554	09/25/2001	Karadogan et al.	709	219	05/27/1998

Other Documents

Citation

Kyees et al., "ADSL: A New Twisted-Pair Access To The Information Highway", IEEE Communication Magazine, Vol. 33, Issue 4, April 1995, pages 52-60.

Huang et al., "Design Of An MPEG-Based Set-Top Box For Video On Demand Services, Acoustics, Speech, And Signal Processing", 1995 International Conference, ICASSP-95, Vol. 4, ISBN:0-7803-2431-5, May 9-12, 1995, pages 2655-2658.

Citation

"A Solution For The Priority Queue Problem Of Deadline-Ordered Service Disciplines", N.R. Figueira, IEEE International Conference On Computer Communications And Networks, September 22-25, 1997, pages 320-325.

Respectfully submitted,

McDonnell Boehnen Hulbert & Berghoff

Date: $\frac{2/19/01}{}$

By:

Timothy R. Baumann Registration No. 40,502

Form PTO-1449 (modified)		Atty. Docket No. 99,818	Serial No. 09/538,342
List of Patents and Publications for Applicant's		Applicant	
SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		Vogel et al.	
		Filing Date: 03/29/2000	Group: 2711
U.S. Patent Documents See Page 1	_	Patent Documents See Page 4	Other Art See Page 4

U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
	Al	4,644,533	02/17/1997	Braff et al.	370	94	05/06/1985
	A2	4,881,263	11/14/1989	Herbison et al.	380	21	09/25/1987
	A3	4,996,685	02/26/1991	Farese et al.	370	58.1	04/10/1989
	A4	5,301,273	04/05/1994	Konishi	395	200	06/18/1991
	A5	5,430,727	07/04/1995	Callon	370	85.13	05/19/1994
	A6	5,598,410	01/28/1997	Stone	370	469	12/29/1994
	A7	5,610,910	03/11/1997	Focsaneanu et al.	370	351	08/17/1995
	A8	5,675,742	10/07/1997	Jain et al.	395	200	06/26/1995
	A9	5,708,654	01/13/1998	Arndt et al.	370	242	11/27/1996
	A10	5,724,510	03/03/1998	Arndt et al.	395	200.5	09/06/1996
	A11	5,790,770	08/04/1998	McClure et al.	395	200.61	07/18/1996
	A12	5,790,806	08/04/1998	Koperda	395	200.82	04/03/1996
	A13	5,793,747	08/11/1998	Kline	370	230	03/14/1996
	A14	5,809,252	09/15/1998	Beighe et al.	395	200.57	12/13/1996
<u>, ·</u>	A15	5,819,028	10/06/1998	Manghirmalani et al.	395	185.1	04/16/1997
	A16	5,828,666	10/27/1998	Focsaneanu et al.	370	389	03/06/1997
	A17	5,835,720	11/10/1998	Nelson et al.	395	200.54	05/17/1996
	A18	5,841,777	11/24/1998	Cohen	370	433	08/30/1996
	A19	5,852,721	12/22/1998	Dillon et al.	395	200.47	02/07/1997
	A20	5,894,479	04/13/1999	Mohammed	370	401	12/10/1996
	A21	5,903,558	05/11/1999	Jones et al.	370.	351	06/28/1996

Examiner:	DATE CONSIDERED:
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Form PTO-1449 (modified)		Atty. Docket No. 99,818	Serial No. 09/538,342	
List of Patents and Publications for	Applicant's	Applicant		
SUPPLEMENTAL INFORMATION DISCLOSURE ST	ratement .	Vogel et al.		
(Use several sheets if necessary)		Filing Date: 03/29/2000	Group: 2711	
U.S. Patent Documents See Page 1	i i		Other Art - See Page 4	

U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
	A22	5,909,549	06/01/1999	Compliment et al.	709	223	11/12/1996
	A23	5,913,037	06/15/1999	Spofford et al.	395	200.56	07/03/1996
	A24	5,915,119	06/22/1999	Cone	395	750.02	10/01/1996
	A25	5,922,051	07/13/1999	Sidey	709	223	05/14/1997
	A26	5,943,604	08/24/1999	Chen et al.	455	5.1	10/31/1997
<u> </u>	A27	5,954,797	09/21/1999	Sidey	709	223	05/14/1997
	A28	5,982,748	11/09/1999	Yin et al.	370	232	10/03/1996
	A29	5,987,524	11/16/1999	Yoshida et al.	709	245	09/30/1997
	A30	5,991,292	11/23/1999	Focsaneanu et al.	370	352	03/06/1997
	A31	5,991,306	11/23/1999	Burns et al.	370	429	08/26/1996
	A32	5,999,536	12/07/1999	Kawafuji et al.	370	401	11/24/1997
	A33	6,003,077	12/14/1999	Bawden et al.	709	223	09/15/1997
	A34	6,005,851	12/21/1999	Craddock et al.	370	329	10/10/1997
	A35	6,006,264	12/21/1999	Colby et al.	709	226	03/30/1998
	A36	6,014,545	01/11/2000	Wu et al.	455	3.1	03/27/1997
	A37	6,031,841	02/29/2000	Woundy	370	410	12/23/1997
	A38	6,041,041	03/21/2000	Ramanathan et al.	370	241	04/15/1997
	A39	6,049,546	04/11/2000	Ramakrishnan	370	412	10/15/1996
	A40	6,049,825	04/11/2000	Yamamoto	709	221	12/15/1997
	A41	6.052,724	04/18/2000	Willie et al.	709	223	09/02/1997
	A42	6,061,349	05/09/2000	Coile et al.	370	389	05/02/1997

EXAMINER:

DATE CONSIDERED:

Form PTO-1449 (modified)		Atty. Docket No. Serial No. 99,818 09/538,342		
List of Patents and Publications for Applicant's		Applicant		
SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		Vogel et al.		
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U.S. Patent Documents See Page 1		Patent Documents See Page 4	Other Art See Page 4	

U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
	A43	6,065,049	05/16/2000	Beser	709	218	02/04/1998
	A44	6,070,187	05/30/00	Subramaniam et al.	709	220	03/26/1998
	A45	6,070,242	05/30/2000	Wong et al.	713	201	12/09/1996
	A46	6,073,178	06/06/2000	Wong et al.	709	229	12/09/1996
	A47	6,075,787	06/13/2000	Bobeck et al.	370	395	05/08/1997
	A48	6,091,709	07/18/2000	Harrison et al.	370	235	11/25/1997
	A49	6,094,431	07/25/2000	Yamato et al.	370	395	11/29/1996
	A50	6,104,700	08/15/2000	Haddock et al.	370	235	02/03/1998
	A51	6,112,258	08/29/2000	Miller et al.	710	19	03/19/1998
	A52	6,122,254	09/19/2000	Aydemir et al.	370	235	11/25/1997
	A53	6,128,298	10/03/2000	Wootton et al.	370	392	10/03/2000
	A54	6,130,879	10/10/2000	Liu	370	230	09/22/1997
	A55	6,130,880	10/10/2000	Naudus et al.	370	235	03/20/1998
	A56	6,137,792	10/24/2000	Jonas et al.	370	354	06/14/1996
	A57	6,137,793	10/24/2000	Gorman et al.	370	360	12/05/1997
	A58	6,148,410	11/14/2000	Naskey et al.	714	4	09/15/1997
	A59	6,157,965	12/05/2000	Mohammed et al.	710	8	02/27/1998
	A60	6,170,061	01/02/2001	Beser	713	201	02/04/1998
	A61	6,178,455	01/23/2001	Schuttte et al.	709	228	04/11/1997
-	A62	6,185,624	02/06/2001	Fijolek et al.	709	239	02/04/1998
	A63	6,189,102	02/13/2001	Beser	713	201	05/27/1998
	A64	6,208,656	03/27/2001	Hrastar et al.	370	401	04/11/1997

Examiner:

DATE CONSIDERED:

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Form PTO-1449 (modified)			Atty. Docket No. Serial No. 99,818 09/538,342				
List of Patents and Publications for Applicant's			Applicant				
SUPPLEMENTAL			Vogel et al.				
INFO	RMATION	DISCLOSURE S	STATEMENT	Filing Date:		Group:	
	(Use se	veral sheets if neces	sary)	03/29/2000		2711	
U.S.	. Patent I	Oocuments	Foreign	Patent Documents			her Art
	See Pa	ge 1		See Page 4		See	Page 4
			U.S. Pat	tent Docume	nts		
Exam.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
	A65	6,212,563	04/03/2001	Beser	709	227	10/01/1998
	A66	6,216,171	04/10/2001	Isono et al.	709	250	02/11/1998
	A67	6,223,222	04/24/2001	Fijolek et al.	709	227	05/14/1998
	A68	6,240,464	05/29/2001	Fijolek et al.	709	250	02/04/1998
	A69	6,260,072	07/10/2001	Rodriguez-Moral	709	241	06/12/1997
	A70	6,269,099	07/31/2001	Borella et al.	370	389	07/01/1998
	A71	6,272,150	08/07/2001	Hrastar	370	486	05/05/1997
	A72	6,275,853	08/14/2001	Beser et al.	709	223	05/27/1998
	A73	6,295,554	09/25/2001	Karadogan et al.	709	219	05/27/1998
			Foreign f	Patent Docur	nents		
Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No
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	В3						· · · · · · · · · · · · · · · · · · ·
	. B4						
	B5					<u> L</u>	
(Other	Art (Includ	ling Auth	or, Title, Date	Pertin	ent Pag	ges, Etc.)
Exam. Init.	Ref. Des.			Citatio	on		
_	Cl	Kyees et al., " Communication	Kyees et al., "ADSL: A New Twisted-Pair Access To The Information Highway", IEEE Communication Magazine, Vol. 33, Issue 4, April 1995, pages 52-60.				ighway", IEEE

Form PTO-1449 (modified)		Atty. Docket No. Serial No. 99,818 09/538,342		
List of Patents and Publications for	Applicant's	Applicant		
SUPPLEMENTAL INFORMATION DISCLOSURE ST	ATEMENT	Vogel et al.		
(Use several sheets if necessary)		Filing Date: 03/29/2000	Group: 2711	
U.S. Patent Documents See Page 1		Patent Documents See Page 4	Other Art See Page 4	

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C2	Huang et al., "Design Of An MPEG-Based Set-Top Box For Video On Demand Services, Acoustics, Speech, And Signal Processing", 1995 International Conference, ICASSP-95, Vol. 4, ISBN:0-7803-2431-5, May 9-12, 1995, pages 2655-2658.
	C3	"A Solution For The Priority Queue Problem Of Deadline-Ordered Service Disciplines", N.R. Figueira, IEEE International Conference On Computer Communications And Networks, September 22-25, 1997, pages 320-325.
	C4	
	C5	
	C6	
	C7	
	C8	
	C9	

Examiner:	DATE CONSIDERED:
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE (Case No. 99,818)

In re Ap	pplicati	on of:	
		Mark O. Vogel et al.) Examiner: To Be Assigned
Serial N	٧o.	09/538,342) Art Unit: 2711
Filed:	March	29, 2000)
For:		d for Improved Cable Modem Ranging Data-Over-Cable System))

TRANSMITTAL LETTER

Commissioner for Patents Washington, DC 20231

- 1. We are transmitting herewith the attached papers for the above-identified patent application:
 - 1) Second Supplemental Information Disclosure Statement (IDS) Letter
 - 2) Second Supplemental Information Disclosure Statement (IDS) PTO-Form 1449
 - 3) Copies of IDS Citations for 09/538,342 (6 Documents)
 - 4) Return Postcard
- 2. A check in the amount of \$0.00 is enclosed for the Filing Fee.
- 3. GENERAL AUTHORIZATION TO CHARGE OR CREDIT FEES: Please charge any additional fees or credit overpayment to Deposit Account No. 13-2490. A duplicate copy of this sheet is enclosed.

By:

Timothy R. Baumann Reg. No. 40,502

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE (Case No. 99,818)

In re Ap	pplicati	on of:)	
		Mark O. Vogel et al.) Examiner: To Be Assign	ed
Serial N	No.	09/538,342) Art Unit: 2711	
Filed:	March	29, 2000)	
For:		d for Improved Cable Modem Ranging Data-Over-Cable System))	

SECOND SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT LETTER

Commissioner for Patents Washington, DC 20231

Dear Sir:

Pursuant to the duty of disclosure provided by 35 C.F.R. § 1.56 and §§ 1.97-98, the applicants wish to make the following references of record in the above-identified application. Copies of the references are enclosed. Copies are also listed in the PTO-1449 form enclosed herewith. It is requested that the documents be given careful consideration and that they be cited of record in the prosecution history of the present application so that they will appear on the face of the patent issuing from the present application.

Portions of the references may be material to the examination of the pending claims, however no such admission is intended. 37 C.F.R. 1.97 (h). The references have not been reviewed in sufficient detail to make any other representation and, in particular, no representation is intended as to the relative importance of any portion of the references. This Statement is not a representation that the cited references have effective dates early enough to be "prior art" within the meaning of 35 U.S.C. sections 102 or 103.

CITED REFERENCES

.)

U.S. Patent Documents

Document		
Number	Date	Name
6,331,987	12-18-01	Beser
6,337,858	01-08-02	Petty et al.
5,926,458	07-20-99	Yin
6,046,979	04-04-00	Bauman
6,332,163	12-18-01	Bowman-Amuah

Other Documents

"Radio Frequency Interface Specification (Interim Specification) SP-RFI-I04-980724", MCNS Holdings, L.P., 1997, Pgs. ii to 196.

Respectfully submitted,

Date: 3/6/02

Timothy R. Baumann

Registration No. 40,502

FORM PTO-1449	U.S. Department of Commerce Patent and Trademark Office	Atty. Docket No.	Serial No.
(Rev. 2-32)		99,818	09/538,342
SECOND SUPPLEMENTAL INI STATEMENT BY			
(Use several sheet	s if necessary)		
· ·	·	Applicant: Mark O. Vogel et al.	
		Filing Date:	Group:
		March 29, 2000	2711

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	1	6,331,987	12-18-01	Beser	370	486	05-27-98
	2	6,337,858	01-08-02	Petty et al.	370	356	10-10-97
	3	5,926,458	07-20-99	Yin	370	230	01-31-97
	4	6,046,979	04-04-00	Bauman	370	229	05-04-98
	5	6,332,163	12-18-01	Bowman-Amuah	709	231	09-01-99

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc).

	6	"Radio Frequency Interface Specification (Interim Specification) SP-RFI-I04-980724", MCNS Holdings, L.P., 1997, Pgs. ii to 196.
EXAMINER	<u> </u>	DATE CONSIDERED

Hon. Commissioner of

S/N: 09/538,342

Atty TRB:hm

Patents and Trademarks

Re: Applicant - Mark O. Vogel et al.

Case No. 99,818

"Method for Improved Cable Modem Ranging in a Data-Over-Cable System"

Sir:

Please place the Patent Office receipt stamp hereon and mail to acknowledge receipt of:

- (1) Transmittal Letter in duplicate;
- (2) Second Supplemental Information Disclosure Statement;
- (3) Second Supplemental Form PTO-1449; and
- (4) 6 Cited References.

Fee Enclosed

Respectfully, McDonnell Boehnen Hulbert & Berghoff Attorney for Applicant

Date Mailed: March ______, 2002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE (Case No. 99,818)

In re A	pplicati	on of:)	
		Mark O. Vogel et al.)	Examiner: To Be Assigned
Serial 1	No.	09/538,342)	Art Unit: 2711
Filed:	March	29, 2000)	
For:		d for Improved Cable Modem Ranging Data-Over-Cable System)	

TRANSMITTAL LETTER

Commissioner for Patents Washington, DC 20231

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- 3. GENERAL AUTHORIZATION TO CHARGE OR CREDIT FEES: Please charge any additional fees or credit overpayment to Deposit Account No. 13-2490. A duplicate copy of this sheet is enclosed.
- 4. CERTIFICATE OF MAILING UNDER 37 CFR § 1.8: The undersigned hereby certifies that this Transmittal Letter and the paper, as described in paragraph 1 hereinabove, are being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on this ______ day of June, 2002.

By:

George I. Lee

Reg. No. 39,269

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE (Case No. 99,818)

In re A	pplication of:)
	Mark O. Vogel et al.) Examiner: To Be Assigned
Serial 1	No. 09/538,342) Art Unit: 2711
Filed:	March 29, 2000)
For:	Method for Improved Cable Modem Ranging In A Data-Over-Cable System	.) }· }

THIRD SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT LETTER

Commissioner for Patents Washington, DC 20231

Dear Sir:

Pursuant to the duty of disclosure provided by 35 C.F.R. § 1.56 and §§ 1.97-98, the applicants wish to make the following references of record in the above-identified application. Copies of the references are enclosed. Copies are also listed in the PTO-1449 form enclosed herewith. It is requested that the documents be given careful consideration and that they be cited of record in the prosecution history of the present application so that they will appear on the face of the patent issuing from the present application.

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CITED REFERENCES

U.S. Patent Documents

Document Number	Date	Name
6,308,328	10-23-01	Bowcutt et al.
6,301,618	10-09-01	Sitaraman et al.
6,301,223	10-09-01	Hrastar et al.
6,370,147	04-09-02	Beser
6,351,773	02-26-02	Fijolek et al.

Other Documents

- 1. "Radio Frequency Interface Specification (Interim Specification) SP-RFI-I05-991105", MCNS Holdings, L.P., 1999, Pgs. ii to 202.
- 2. "Radio Frequency Interface Specification (Interim Specification) SP-RFIv1.1-I06-001215", MCNS Holdings, L.P., 2000, Pgs. ii to 432.

Respectfully submitted,

By:

George I. Lee

Registration No. 39,269

FORM PTO-1449 (Rev. 2-32)	U.S. Department of Commerce Patent and Trademark Office	Atty. Docket No.	Serial No.
THIRD SUPPLEMENTAL IN STATEMENT I	FORMATION DISCLOSURE BY APPLICANT eets if necessary)	99,818	09/538,342
	••••••••••••••••••••••••••••••••••••••	Applicant: Mark O. Vogel et al.	
		Filing Date: March 29, 2000	Group: 2711

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	1	6,308,328	10-23-01	Bowcutt et al.	725	111	04-10-97
	2	6,301,618	10-09-01	Sitaraman et al.	709	227	09-11-00
	3	6,301,223	10-09-01	Hrastar et al.	370	227	04-11-97
	4	6,370,147	04-09-02	Beser	370	401	04-23-98
	5	6,351,773	02-26-02	Fijolek et al.	709	228	12-21-98

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc).

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	7	"Radio Frequency Interface Specification (Interim Specification) SP-RFIv1.1-I06-001215", MCNS Holdings, L.P., 2000, Pgs. ii to 432.		
EXAMINER		DATE CONSIDERED		

Hon. Commissioner of

S/N: 09/538,342

Atty GIL:hm

Patents and Trademarks

Re: Applicant - Mark O. Vogel et al.

Case No. 99,818

"Method for Improved Cable Modem Ranging in a Data-Over-Cable System"

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- (4) 7 Cited References.

Fee Enclosed

Respectfully,
McDonnell Boehnen Hulbert & Berghoff
Attorney for Applicant

Date Mailed: June 19, 2002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE (Case No. 99,818)

In re A	pplication	on of:)	
		Mark O. Vogel et al.)	Examiner: To Be Assigned
Serial :	No.	09/538,342)	Art Unit: 2711
Filed:	March	29, 2000)	
For:		d for Improved Cable Modem Ranging)	

TRANSMITTAL LETTER

Commissioner for Patents Washington, DC 20231

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By:

Bradley J. Hulber

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE (Case No. 99,818)

In re A	pplicati	on of:)	
		Mark O. Vogel et al.)	Examiner: To Be Assigned
Serial 1	No.	09/538,342)	Art Unit: 2711
Filed:	March	29, 2000)	
For:		od for Improved Cable Modem Ranging))	

FOURTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT LETTER

Commissioner for Patents Washington, DC 20231

Dear Sir:

Pursuant to the duty of disclosure provided by 35 C.F.R. § 1.56 and §§ 1.97-98, the applicants wish to make the following references of record in the above-identified application. Copies of the references are enclosed. Copies are also listed in the PTO-1449 form enclosed herewith. It is requested that the documents be given careful consideration and that they be cited of record in the prosecution history of the present application so that they will appear on the face of the patent issuing from the present application.

Portions of the references may be material to the examination of the pending claims, however no such admission is intended. 37 C.F.R. 1.97 (h). The references have not been reviewed in sufficient detail to make any other representation and, in particular, no representation is intended as to the relative importance of any portion of the references. This Statement is not a representation that the cited references have effective dates early enough to be "prior art" within the meaning of 35 U.S.C. sections 102 or 103.

CITED REFERENCES

U.S. Patent Documents

Document Number	Date	Name
5,815,664	09-29-98	Asano
6,032,019	02-29-00	Chen et al.
6,442,158	08-27-02	Beser

Respectfully submitted,

Bradley J. Hulbert Registration No. 30,130

FORM PTO-1449	U.S. Department of Commerce Patent and Trademark Office	Atty. Docket No.	Serial No.
(Rev. 2-32)	Tatent and Trademark Office	99,818	09/538,342
FOURTH SUPPLEMENTAL II STATEMENT B			
(Use several she	ets if necessary)		<u> </u>
` .		Applicant: Mark O. Vogel et al.	
		Filing Date:	Group:
·		March 29, 2000	2711

U.S. PATENT

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	1.	5,815,664	09-29-98	Asano	395	200.57	03-19-96
	2.	6,032,019	02-29-00	Chen et al.	455	5.1	01-20-99
<u> </u>	3.	6,442,158	08-27-02	Beser	370	352	05-27-98

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc).

·		
EXAMINER	DATE CONSIDERED	

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

McDONNELL BOEHNEN HULBERT'& BERGHOFF 300 SOUTH WACKER DRIVE CHICAGO, ILLINOIS 60608 TELEPHONE (312) 913-0001 Hon. Commissioner of

S/N: 09/538,342

BJH:hm

Patents and Trademarks

Re: Applicant - Mark O. Vogel et al.

Case No. 99,818

"Method for Improved Cable Modern Ranging in a Data-Over-Cable System"

Sir:

Please place the Patent Office receipt stamp hereon and mail to acknowledge receipt of:

- Transmittal Letter in duplicate; (1)
- Fourth Supplemental Information Disclosure Statement; (2)
- Fourth Supplemental Form PTO-1449; and (3)
- 3 Cited References. (4)

Fee Enclosed

Respectfully, McDonnell Boehnen Hulbert & Berghoff Attorney for Applicant

\$<u>-0-</u> Date Mailed: November 12, 2002

In re A	pplicati	on of:)	
		Mark O. Vogel et al.)	Examiner: To Be Assigned
Serial 1	No.	09/538,342)	Art Unit: 2711
Filed:	March	1 29, 2000)	
For:		od for Improved Cable Modem Ranging Data-Over-Cable System)	

TRANSMITTAL LETTER

Commissioner for Patents Washington, DC 20231

- 1. We are transmitting herewith the attached papers for the above-identified patent application:
 - 1) Fifth Supplemental Information Disclosure Statement (IDS) Letter
 - 2) Fifth Supplemental Information Disclosure Statement (IDS) PTO-Form 1449
 - 3) Copies of IDS Citations for 09/538,342 (12 Documents)
 - 4) Return Postcard
- 2. A check in the amount of \$0.00 is enclosed for the Filing Fee.
- 3. GENERAL AUTHORIZATION TO CHARGE OR CREDIT FEES: Please charge any additional fees or credit overpayment to Deposit Account No. 13-2490. A duplicate copy of this sheet is enclosed.
- 4. CERTIFICATE OF MAILING UNDER 37 CFR § 1.8: The undersigned hereby certifies that this Transmittal Letter and the paper, as described in paragraph 1 hereinabove, are being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on this 5th day of March, 2003.

By:

Bradley J. Hulbert Reg. No. 30:130

Hult

In re Ap	pplication	on of:)	. *
		Mark O. Vogel et al.) Exa	âminer: To Be Assigned
Serial N	No.	09/538,342) Art	Unit: 2711
Filed:	March	29, 2000)	
For:		d for Improved Cable Modem Ranging Data-Over-Cable System))	

FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT LETTER

Commissioner for Patents Washington, DC 20231

Dear Sir:

Pursuant to the duty of disclosure provided by 35 C.F.R. § 1.56 and §§ 1.97-98, the applicants wish to make the following references of record in the above-identified application. Copies of the references are enclosed. Copies are also listed in the PTO-1449 form enclosed herewith. It is requested that the documents be given careful consideration and that they be cited of record in the prosecution history of the present application so that they will appear on the face of the patent issuing from the present application.

Portions of the references may be material to the examination of the pending claims, however no such admission is intended. 37 C.F.R. 1.97 (h). The references have not been reviewed in sufficient detail to make any other representation and, in particular, no representation is intended as to the relative importance of any portion of the references. This Statement is not a representation that the cited references have effective dates early enough to be "prior art" within the meaning of 35 U.S.C. sections 102 or 103.

CITED REFERENCES

U.S. Patent Documents

Document		
Number	Date	Name
6,510,162	01-21-03	Fijolek et al.
5,929,850	07-27-99	Broadwin et al.
5,528,595	06-18-96	Walsh et al.

Other Documents

- 1. Droms, R., Dynamic Host Configuration Protocol, Request for Comments 1541, October 1993, Pages 1 to 31.
- 2. RFC 791, Internet Protocol, DARPA Internet Program Protocol Specification, September 1981, Pgs. 1-37.
- 3. Postel, J., Internet Protocol, DARPA Internet Program Protocol Specification, RFC 792, September 1981, Pgs. 1-14.
- 4. Postel, J., User Datagram Protocol, RFC 768, August 28, 1980, Pgs. 1-3.
- 5. RFC 793, Transmission Control Protocol, DARPA Internet Program Protocol Specification, September 1981, Pgs. 1-68.
- 6. Case, J. et al., A Simple Network Management Protocol (SNMP), RFC 1157, May 1990, Pgs. 1-26.
- 7. Sollins, K., The TFTP Protocol (Revision 2), RFC 1350, July 1992, Pgs. 1-9.
- 8. Alexander, S., DHCP Options and BOOTP Vendor Extensions, RFC 2132, March 1997, Pgs. 1-27.
- "Radio Frequency Interface Specification (Interim Specification) SP-RFIv1.1-103-991105", MCNS Holdings, L.P., 1999, Pgs. Ii to 366.

Respectfully submitted,

Date: March 5, 2003

By: Dre

Bradley J. Hulbert

Registration No. 30,130

FORM PTO-1449	U.S. Department of Commerce	Atty. Docket No.	Serial No.
(Rev. 2-32)	Patent and Trademark Office	99,818	09/538,342
	NFORMATION DISCLOSURE BY APPLICANT		
(Use several sh	heets if necessary)		
	•	Applicant: Mark O. Vogel et al.	
		Filing Date:	Group:
		March 29, 2000	2711

U.S. PATENT

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
-	1.	6,510,162	01-21-03	Fijolek et al.	370	432	05-27-98
	2.	5,929,850	07-27-99	Broadwin et al.	345	327	07-01-96
	3.	5,528,595	06-18-96	Walsh et al.	370	85.13	11-14-95

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc).

4.	Droms, R., Dynamic Host Configuration Protocol, Request for Comments 1541, October 1993, Pages 1 to 31.				
5.	RFC 791, Internet Protocol, DARPA Internet Program Protocol Specification, September 1981, Pgs. 1-37.				
6.	Postel, J., Internet Protocol, DARPA Internet Program Protocol Specification, RFC 792, September 1981, Pgs. 1-14.				
7.	Postel, J., User Datagram Protocol, RFC 768, August 28, 1980, Pgs. 1-3.				
8.	RFC 793, Transmission Control Protocol, DARPA Internet Program Protocol Specification, September 1981, Pgs. 1-68.				
9.	Case, J. et al., A Simple Network Management Protocol (SNMP), RFC 1157, May 1990, Pgs. 1-26.				
10.	Sollins, K., The TFTP Protocol (Revision 2), RFC 1350, July 1992, Pgs. 1-9.				
11.	Alexander, S., DHCP Options and BOOTP Vendor Extensions, RFC 2132, March 1997, Pgs. 1-27.				
12.	"Radio Frequency Interface Specification (Interim Specification) SP-RFIv1.1-103-991105", MCNS Holdings, L.P., 1999, Pgs. Ii to 366.				
EXAMINER DATE CONSIDERED					

Re: Applicant - Mark O. Vogel et al. Patents and Trademarks Hon. Commissioner of

S/N: 09/538,342

BJH:hm

Case No. 99,818

"Method for Improved Cable Modem Ranging in a Data-Over-Cable System"

Sir:

Please place the Patent Office receipt stamp hereon and mail to acknowledge receipt of:

Transmittal Letter in duplicate;

Fifth Supplemental Information Disclosure Statement;

Fifth Supplemental Form PTO-1449; and

12 Cited References.

Fee Enclosed

McDonnell Boehnen Hulbert & Berghoff Attorney for Applicant Respectfully,

Date Mailed: March 5, 2003

In re A	pplicatio	on of:)	
		Mark O. Vogel et al.)	Examiner: To Be Assigned
Serial l	No.	09/538,342)	Art Unit: 2711
Filed:	March	29, 2000)	
For:		d for Improved Cable Modem Ranging ata-Over-Cable System	·)	

TRANSMITTAL LETTER

Commissioner for Patents Washington, DC 20231

- 1. We are transmitting herewith the attached papers for the above-identified patent application:
 - 1) Sixth Supplemental Information Disclosure Statement (IDS) Letter
 - 2) Sixth Supplemental Information Disclosure Statement (IDS) PTO-Form 1449
 - 3) Copies of IDS Citations for 09/538,342 (3 Documents)
 - 4) Return Postcard
- 2. A check in the amount of \$0.00 is enclosed for the Filing Fee.
- 3. GENERAL AUTHORIZATION TO CHARGE OR CREDIT FEES: Please charge any additional fees or credit overpayment to Deposit Account No. 13-2490. A duplicate copy of this sheet is enclosed.
- 4. CERTIFICATE OF MAILING UNDER 37 CFR § 1.8: The undersigned hereby certifies that this Transmittal Letter and the paper, as described in paragraph 1 hereinabove, are being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on this 19th day of March, 2003.

By:

Bradley J. Hulbert

Reg. No. 30,130

In re A	pplicati	on of:)	
		Mark O. Vogel et al.)	Examiner: To Be Assigned
Serial :	No.	09/538,342)	Art Unit: 2711
Filed:	March	29, 2000)	
For:		d for Improved Cable Modem Ranging	;) ;)	

SIXTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT LETTER

Commissioner for Patents Washington, DC 20231

Dear Sir:

Pursuant to the duty of disclosure provided by 35 C.F.R. § 1.56 and §§ 1.97-98, the applicants wish to make the following references of record in the above-identified application. Copies of the references are enclosed. Copies are also listed in the PTO-1449 form enclosed herewith. It is requested that the documents be given careful consideration and that they be cited of record in the prosecution history of the present application so that they will appear on the face of the patent issuing from the present application.

Portions of the references may be material to the examination of the pending claims, however no such admission is intended. 37 C.F.R. 1.97 (h). The references have not been reviewed in sufficient detail to make any other representation and, in particular, no representation is intended as to the relative importance of any portion of the references. This Statement is not a representation that the cited references have effective dates early enough to be "prior art" within the meaning of 35 U.S.C. sections 102 or 103.

CITED REFERENCES

U.S. Patent Documents

Document	Date	Name
Number	Date	Name
5,960,177	09-28-99	Tanno
5,941,988	08-24-99	Bhagwat et al.
6,289,377	09-11-01	Lalwaney et al.

Respectfully submitted,

Date: March 19, 2003

Bradley J. Hulbert Registration No. 30,130

FORM PTO-1449	U.S. Department of Commerce Patent and Trademark Office	Atty. Docket No.	Serial No.
(Rev. 2-32)	Patent and Trademark Office	99,818	09/538,342
SIXTH SUPPLEMENTAL INFORMA STATEMENT BY APPL			
(Use several sheets if nece	essary)		
	•	Applicant: Mark O. Vogel et al.	
		Filing Date:	Group:
		March 29, 2000	2711

U.S. PATENT

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	1.	5,960,177	09-28-99	Tanno	395	200.59	03-12-96
	2.	5,941,988	08-24-99	Bhagwat et al.	713	201	01-27-97
	3.	6,289,377	09-11-01	Lalwaney et al.	709	222	10-27-98

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc).

EXAMINER	DATE CONSIDERED	
		·

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

Modonnell-Boehnen Hulbert & Berghoff 300 South Wacker Drive CHICAGO, ILLINOIS 60808 TELEPHONE (312) 913-0001 Hon. Commissioner of

S/N: 09/538,342

BJH:hm

Patents and Trademarks

Re: Applicant - Mark O. Vogel et al.

Case No. 99,818

"Method for Improved Cable Modem Ranging in a Data-Over-Cable System"

Sir:

Please place the Patent Office receipt stamp hereon and mail to acknowledge receipt of:

- Transmittal Letter in duplicate; (1)
- Sixth Supplemental Information Disclosure Statement; (2)
- Sixth Supplemental Form PTO-1449; and (3)
- 3 Cited References. (4)

Fee Enclosed

Respectfully, McDonnell Boehnen Hulbert & Berghoff Attorney for Applicant

\$ -0-Date Mailed: March 19, 2003

In re A	pplication of:)	
	Mark O. Vogel et al.)	Examiner: To Be Assigned
Serial l	No. 09/538,342) .	Art Unit: 2711
Filed:	March 29, 2000)	
For:	Method for Improved Cable Modem Ranging In A Data-Over-Cable System)	

TRANSMITTAL LETTER

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

- 1. We are transmitting herewith the attached papers for the above-identified patent application:
 - 1) Seventh Supplemental Information Disclosure Statement (IDS) Letter
 - 2) Seventh Supplemental Information Disclosure Statement (IDS) PTO-Form 1449
 - 3) Copies of IDS Citations for 09/538,342 (5 Documents)
 - 4) Return Postcard
- 2. A check in the amount of \$180.00 is enclosed for the Filing Fee.
- 3. GENERAL AUTHORIZATION TO CHARGE OR CREDIT FEES: Please charge any additional fees or credit overpayment to Deposit Account No. 13-2490. A duplicate copy of this sheet is enclosed.
- 4. CERTIFICATE OF MAILING UNDER 37 CFR § 1.8: The undersigned hereby certifies that this Transmittal Letter and the paper, as described in paragraph 1 hereinabove, are being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria Virginia 22313-1450 on this day of April, 2003.

By

Enrique Perez

In re A	pplication of:)
	Mark O. Vogel et al.) Examiner: To Be Assigned
Serial 1	No. 09/538,342) Art Unit: 2711
Filed:	March 29, 2000)
For:	Method for Improved Cable Modem Ranging In A Data-Over-Cable System))

TRANSMITTAL LETTER

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

- 1. We are transmitting herewith the attached papers for the above-identified patent application:
 - 1) Seventh Supplemental Information Disclosure Statement (IDS) Letter
 - 2) Seventh Supplemental Information Disclosure Statement (IDS) PTO-Form 1449
 - 3) Copies of IDS Citations for 09/538,342 (5 Documents)
 - 4) Return Postcard
- 2. A check in the amount of \$180.00 is enclosed for the Filing Fee.
- GENERAL AUTHORIZATION TO CHARGE OR CREDIT FEES: Please charge any additional fees or credit overpayment to Deposit Account No. 13-2490. A duplicate copy of this sheet is enclosed.
- 4. CERTIFICATE OF MAILING UNDER 37 CFR § 1.8: The undersigned hereby certifies that this Transmittal Letter and the paper, as described in paragraph 1 hereinabove, are being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria Virginia 22313-1450 on this day of April, 2003.

Bv:

Enrique Pere

Reg. No. 43,85

ln re A	pplication	on of:)	
		Mark O. Vogel et al.)	Examiner: To Be Assigned
Serial 1	No.	09/538,342)	Art Unit: 2711
Filed:	March	29, 2000)	
For:		d for Improved Cable Modem Ranging)	

SEVENTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT LETTER

Commissioner for Patents P.O. Box 1450 Alexandria Virginia 22313-1450

Dear Sir:

Pursuant to the duty of disclosure provided by 35 C.F.R. § 1.56 and §§ 1.97-98, the applicants wish to make the following references of record in the above-identified application. Copies of the references are enclosed. Copies of the references are also listed in the PTO-1449 form enclosed herewith. It is requested that the documents be given careful consideration and that they be cited of record in the prosecution history of the present application so that they will appear on the face of the patent issuing from the present application. Also, enclosed is the requisite fee pursuant to 37 C.F.R. §§ 1.97(c) and 1.17 (p), \$180.00.

Portions of the references may be material to the examination of the pending claims, however no such admission is intended. 37 C.F.R. 1.97 (h). The references have not been reviewed in sufficient detail to make any other representation and, in particular, no representation is intended as to the relative importance of any portion of the references. This Statement is not a representation that the cited

references have effective dates early enough to be "prior art" within the meaning of 35 U.S.C. sections 102 or 103.

CITED REFERENCES

U.S. Patent Documents

Document		
Number	Date	Name
6,393,478	05-21-02	Bahlmann
6,064,372	05-16-00	Kahkoska

U.S. Published Applications

Number	Date	Name
US 2003/0028891 A1	02-06-03	Hardt et al.
US 2002/0136165 A1	09-26-02	Ady et al.
US 2002/0122050 A1	09-05-02	Sandberg

Respectfully submitted,

Date: APRil 9, 2003

By: _____

Registration No. 43,

FORM PTO-1449	U.S. Department of Commerce	Atty. Docket No.	Serial No.
(Rev. 2-32)	Patent and Trademark Office	99,818	09/538,342
SEVENTH SUPPLEMENTAL INFORM STATEMENT BY APPL			
(Use several sheets if nece	essary)		
, and the second	. 1	Applicant: Mark O. Vogel et al.	
		Filing Date:	Group:
		March 29, 2000	2711

U.S. PATENT DOCUMENTS

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	1.	6,393,478	05-21-02	Bahlmann	709	224	02-22-99
	2.	6,064,372	05-16-00	Kahkoska	345	173	11-27-96

U.S. PUBLISHED PATENT APPLICATIONS

Examiner Initial		Publication Number	Pub. Date	Name	Class	Subclass	Filing Date if Appropriate
<u> </u>	3.	US 2003/0028891 A1	02-06-03	Hardt et al.	725	107	08-03-01
	4.	US 2002/0136165 A1	09-26-02	Ady et al.	370	241	03-23-01
	5.	US 2002/0122050 A1	09-05-02	Sandberg	345	705	12-30-00

FOREIGN PATENT DOCUMENTS

						Caladaa	Translation
		Document Number	Date	Country	Class	Subclass	
EXA	EXAMINER				SIDERED		

THE FACE OF THIS CHECK IS PRINTED BLUE - THE BACK CONTAINS A SIMULATED WATERMARK

mbhb

McDonnell Boehnen Hulbert & Berghoff Law Offices 300 South Wacker Drive Chicago, Illinois 60606-6709

USBANK 70-477-719

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ONE HUNDRED EIGHTY AND 00/100 Dollars

TO THE ORDER OF

U.S. Patent & Trademark Office

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Hon. Commissioner of

S/N: 09/538,342

Atty EP:hm

Patents and Trademarks

Re: Applicant - Mark O. Vogel et al.

Case No. 99,818

"Method for Improved Cable Modem Ranging in a Data-Over-Cable System"

Sir:

Please place the Patent Office receipt stamp hereon and mail to acknowledge receipt of:

- (1) Transmittal Letter in duplicate;
- (2) Seventh Supplemental Information Disclosure Statement;
- (3) Seventh Supplemental Form PTO-1449; and
- (4) 5 Cited References.

\$_180.00 Date Mailed: April 9 to

Fee Enclosed

__

Respectfully,
McDonnell Boehnen Hulbert & Berghoff
Attorney for Applicant

Floa. Commissioner of S/N 09/538,342 Patents and Trademarks Re: Applicant - Mark O. Vogel et al. Case No. 99,818 Method for Improved Cable Modern Ranging in a Data-Over-Cable System Please place the Patent Office receipt stamp hereon and mail to acknowledge receipt of: Transmittal in Duplicate information Disclosure Statement (IDS) PTO-1449 Form Copies of Fifty-Eight (58) Cited References for 09/538,342 ☐ Filing Fee Check Respectfully, \$-0-McDonnell Boehnen Hulbert & Berghoff Attorney for Applicant Date Mailed: June 16, 2000 1 1111 1111 1111 111 11 11 11 11 111

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	Commissioner of S/N ts and Trademarks Re: Applicant – Ma	√1: 09/538,342 	Atty TRB:hm Case No. 99,818
	"Method for Improved Ca	able Modem Ranging in a Data-	Over-Cable System"
Sir:			
	Please place the Patent Of	ffice receipt stamp hereon and n	nail to acknowledge receipt of:
(1)	Transmittal Letter in dupl	icate;	
(2)	Second Supplemental Info	ormation Disclosure Statement;	IPE
(3)	Second Supplemental For		01, 5
(4)	6 Cited References.		/ 3
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	•		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
Fee E	nclosed	Respectfully	
		McDonnell Boehnen Hulbe	ert & Berghoff RADEM
\$ <u>-0</u>	- .	Attorney for App	licant
Date N	// // // // // // // // // // // // //	1 - 1 -	

Hon. Commissioner of

S/N: 09/538,342

GIL:hm Atty

Patents and Trademarks

Re: Applicant - Mark O. Vogel et al.

Case No. 99,818

"Method for Improved Cable Modern Ranging in a Data-Over-Cable System"

Sir:

Please place the Patent Office receipt stamp hereon and mail to acknowledge receipt of:

- Transmittal Letter in duplicate; (1)
- Third Supplemental Information Disclosure Statement; (2)
- Third Supplemental Form PTO-1449; and (3)
- 7 Cited References. (4)

JUN 2 4 2002

Fee Enclosed

Respectfully, McDonnell Boehnen Hulbert & Berghoff Attorney for Applicant

\$_-0-Date Mailed: June 19, 2002

BEST AVAILABLE COPY

BEST AVAILABLE COPY

Hon. Commissioner of

S/N: 09/538,342

Atty TRB/gs

Patents and Trademarks

Re: Applicant - Vogel et al.

Case No. 99,818

"Method For Improved Cable Modem Ranging In A Data-Over-Cable System"

Sir:

Please place the Patert Office receipt stamp hereon and mail to a wile to receipt of

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(1) Transmittal Letter in duplicate;

- (2) Supplemental Information Disclosure Statement
- (3) Supplemental Form PTO-1449; and
- (4) 76 Cited References.

B JAN 8 8 2002

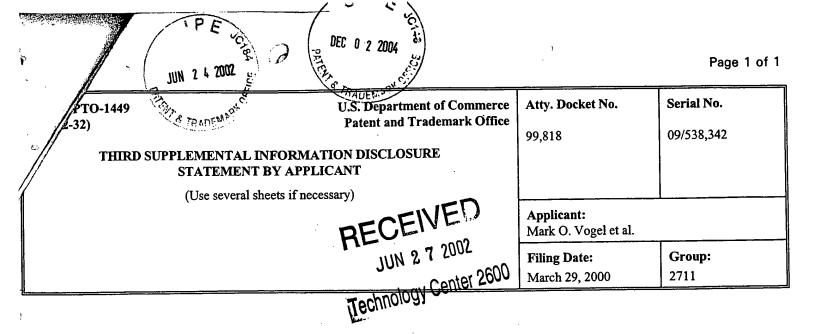
Fee Enclosed

Respectfully, DEMANDONNELL Boehnen Hulbert & Berghoff

- 0 - Attorney for Applicant

Date Mailed: December 19, 2001

111 V



U.S. PATENT DOCUMENTS

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
Seo	1	6,308,328	10-23-01	Bowcutt et al.	725	111	04-10-97
SEB	2	6,301,618	10-09-01	Sitaraman et al.	709	227	09-11-00
566	3	6,301,223	10-09-01	Hrastar et al.	370	227	04-11-97
553	4	6,370,147	04-09-02	Beser	370	401	04-23-98
525	5	6,351,773	02-26-02	Fijolek et al.	709	228	12-21-98

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc).

SEIS	6	"Radio Frequency Interface Specification (Interim Specification) SP-RFI-I05-991105", MCNS Holdings, L.P., 1999, Pgs. ii to 202.		
503	7	"Radio Frequency Interface Specification (Interim Specification) SP-RFIv1.1-I06-001215", MCNS Holdings, L.P., 2000, Pgs. ii to 432.		
EXAMINER DATE CONSIDERED 2/14/03				

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

McDONNELL BOEHNEN HULBERT & BERGHOFF 300 SOUTH WACKER DRIVE CHICAGO, ILLINOIS 60606 TELEPHONE (312) 813-0001 Form PTO-1449 (modified)

List of Patents and Publications for Applicant's

0 8 2002

SUPPLEMENTAL

FORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

Atty. Docket No. 99,818

Serial No. 09/538,342

Applicant

Vogel et al.

Filing Date: 03/29/2000

Group: 2711

U.S. Patent Documents

See Page 1

Foreign Patent Documents

See Page 4

Other Art See Page 4

U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number			Class	Sub Class	Filing Date of App.
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99,818

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Applicant:

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Patents and Trademarks

Re: Applicant - Mark O. Vogel et al.

Case No. 99,818

"Method for Improved Cable Modem Ranging in a Data-Over-Cable System"

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McDonnell Boehnen Hulbert & Bergho

Attorney for Applicant

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